

**San Juan River Basin
Recovery Implementation Program
Biology Committee
Draft Meeting Summary
May 15 - 16, 2001**

Members Present:	Representing:
Jim Brooks, Chairman	U. S. Fish and Wildlife Service, Region 2
Frank Pfeifer	U. S. Fish and Wildlife Service, Region 6
Ron Bliesner	U. S. Bureau of Indian Affairs
Vince Lamarra	Navajo Nation
Bill Miller	Southern Ute Indian Tribe
Paul Holden	Jicarilla Apache Nation
Tom Wesche	Water Development
Larry Crist	U. S. Bureau of Reclamation
Tom Nesler	State of Colorado

See Attachment A for other attendees.

Jim Brooks, Chairman welcomed everyone to the meeting. The agenda was reviewed and updated to include a brief discussion on flow releases from Navajo Dam, a summary of the Hydrology Committee activity, and Recovery Goals.

Review of February 5-6 Meeting Summary – The meeting summary was approved with changes submitted by Vince Lamarra and Bill Miller on the population modeling information and Julie Jackson's suggestions that will be incorporated.

Flow Release out of Navajo Dam – Starting on May 15 with 1000 cfs, the flows will increase to 5,000 cfs on May 23 and will remain at 5,000 through June 18. The flows will ramp down to 1,000 cfs on June 26. At the last meeting, we were not sure that there was going to be a spring release. This does fit into our regular release pattern. The Bureau of Reclamation (Reclamation) has used the operating criteria and calculated storage space needs to come up with the release. This meets the flow recommendations.

Hydrology Committee – Ron Bliesner gave a brief summary of the last Hydrology Committee meeting which was a conference call instead of meeting. They are making some progress in the modeling effort, but the biggest holdup is getting New Mexico's data. For the first time, we have a commitment from New Mexico that we will have some of the data by the

end of July, and then the other portion sometime after the first of the year. Gage corrections will be done in June. Modeling has slipped a year due to financial issues and data issues. Errol Jensen is still working on the 2002 budget and figuring out what funds can't be committed this year and what will have to be done in 2002. Overall, the total budget will not exceed the original \$400,000 by much.

One of the issues that generated a lot of discussion on the conference call was the shortage criteria that is to be used on the users of Navajo Dam, including the San Juan/Chama project. The Navajo Dam legislation says that all users will share in shortages, including San Juan/Chama. The Hydrology Committee has not really figured out how to deal with the issues yet. Right now it is not a problem because everyone has enough water.

The Hydrology Committee will have another conference call on June 1.

Navajo- Gallup Pipeline – The Bureau of Indian Affairs (BIA) initiated informal consultation on the Navajo-Gallup Pipeline project May 14 with the Fish and Wildlife Service (Service). The draft biological assessment will not be out until fall. The BIA and the Service talked about what the project looks like, how the depletions will be handled, what the water rights looks like. BIA is not waiting on the model to proceed. They are trying to get everything worked out before get the biological assessment complete.

Long Range Plan (LRP) – Nothing has been done on the long range plan. John Whipple was the only Coordination Committee member that submitted comments on the draft LRP. A small task force was put together with members from each committee. Tom Pitts sent a fax at the end of March (a copy of the RIPRAP from Upper Basin) which was an example the kind of detail he would like to see in the LRP. Jim Brooks has not set up a meeting or call with the task force.

The RIPRAP format isn't very different from what we have except it add who is responsible for the work and the status. If we followed the format, we would put our fiscal year commitments. We may need more detail in some areas, but not in others. There might be more guidance on the conference call. *Jim will schedule a conference call this week to discuss the LRP.*

Program Evaluation Report – Paul Holden discussed his response to John Whipple and Tom Pitts regarding the Program Evaluation Report. He tried to write the comments in the same style as he did responding to the flow recommendations. The next step is to send it to the Coordination Committee and maybe post to the web. We need to pay attention to how we respond to native fish community comments, because those comments will come again, in the work plan and in the LRP.

The Biology Committee recommend the following changes to the draft responses: Tom Pitts, comment 32 -“Screening” instead of prevent, use reduce.” Comment 26 - the goal for razorback sucker had not changed when the PER was written last August, and it doesn't include the changes made at the February meeting. *Paul Holden will add a note that indicates that since writing the PER, the numbers have changed. He will do this where ever information has changed since the writing of the report. If anyone has additional comments on the draft responses, please get them to Paul by May 23.*

Recovery Goals – There is still a lot of debate on what the recovery goals should contain. The State of Colorado had a major issue with the way they were written. Tom Pitts (as Upper Basin representative) is meeting with Margot Zallen and the Bob Muth, the Upper Basin Program Director to discuss his issues. Colorado still hasn't had their meeting with the Service yet to discuss their issues. The Lower Basin still had some outstanding issues as well. The goals may be out later this year.

Positive Biological Response – Larry Crist, Reclamation, discussed the latest draft of the criteria. He has incorporated comments from the last Biology Committee meeting. The main difference is that this version requires specific criteria. This doesn't represent recovery of the fish, just a positive biological response.

There was some discussion of the criteria where we are talking once in the five year period or an average in the five year period. The criteria need to be clarified so everyone is clear on expectation. Reclamation wanted these criteria to be consistent with Program long term monitoring plan.

Range expansion was explained as a regular seasonal occurrence or regular occurrence in a reach where they haven't been before. As it is currently written for razorback sucker, range expansion would be outside of critical habitat. It was suggested that the portion be removed for razorback suckers.

These criteria would be revisited if recovery goals are changed significantly. The Biology Committee should also review this at the end of the five year monitoring period.. The criteria will probably be used to measure sufficient progress in the San Juan and will definitely be used for reinitiation of the Animas-LaPlata consultation.

Based on what Larry heard, the numbers won't change, but the text will be edited to define things a little better. He will delete Attachment 1 (Recovery Goals) and will define what they are at this stage. Larry will make the necessary changes and will submit to the Service. The Committee concurred with the document and the process.

Propagation – On February 5, the Biology Committee talked about propagation and rearing ponds. Mainly about razorback sucker. Joel Lusk, Jim Brooks and William Miller took three samples down by Bluff. They are all different types of pond areas. The best sample was at Cadillac Ranch. We are waiting for the other test results from the lab.

The Committee reviewed the BIA proposal for additional rearing ponds. The new ponds would be located in Block 3 of NIIP. The proposal is to build six ponds for a total of 16.5 acres. It would be best to build them all at once. The cost is higher than current ponds because they would be close to the road to the mine and would require fencing. The total cost is \$450,000 which is \$27,000/acre. This is approximately \$10,000/acre more than Hidden pond because these would require more pipeline and all new construction. Operation and maintenance would be covered by BIA. These ponds are not flow through. They may have to be flushed some if they don't leak so we can keep the water quality up.

There was a discussion about having the ponds all together. We need to assess the risks to raising fish when they are so close together. We will likely have salamander and possibly migration predation issues.

Construction would have to be completed by September 15 if we want to fill them this fall. This means that we would need to start construction by end of July. No Section 7 consultation would be needed because it is part of the NIIP depletion.

Tom Wesche reported that Randy Kirkpatrick has talked with local landowners about providing pond space and there is some interest. We could look at these as support ponds. The City of Farmington is currently looking at their gravel pit next to the power plant as a possible pond site. They are discussing internally, but they also need to look at the septic tank issues in the area. They would be using San Juan River water.

The Committee proposed to have a main system for rearing, and up to 16 acres additional ponds for back up. There are still a lot of unknowns at this point. If you get more ponds, you decrease the density of the fish in the pond and then the growth is better. You can then stock larger fish which seem to do better.

The Biology Committee will recommend to the Coordination Committee acceptance of the BIA proposal and look for additional back up ponds in the area. ***Larry Crist will talk with Brent Uilenberg about this issue so the budget implication can be discussed at the June 19 Coordination Committee Meeting. Tom Wesche and Frank Pfeifer will develop a process and criteria for looking at private pond.***

If there are any additional comments on BIA's pond proposal, please get them to Ron Bliesner before June 8.

Razorback Sucker stocking – Steve Platania and Frank Pfeifer will be stocking razorback suckers into the ponds tonight. They have approximately 50,000 and will put them in Avocet pond. Twenty one stocked razorback suckers were recaptured during the May 2001 razorback monitoring trip. Fourteen of them came out of Avocet from the fall 2000 stocking. Four were from the November 1994 stocking and three were from the September 1997 stocking. One of the recaptured fish was 501 mm TL and all 21 recaptured fish were > 345 mm TL. All 21 recaptured fish were > 300 mm TL when they were originally stocked into the river. Recaptures ranged from RM 156.0 (upstream of Shiprock, NM) to RM 100.3 (downstream of Aneth, UT).

Colorado Pikeminnow stocking – One hundred forty eight 10 year old pikeminnow (i.e., 1991 year-class) were stocked in the San Juan River at Farmington (at the Hwy. 371 bridge, RM 180.2) on April 11, 2001. On the May 2001 razorback sucker monitoring trip, none of the eight radio-tagged fish were contacted downstream of Hogback. From PNM weir to Hogback, there was no contact and no PIT-tagged fish were recaptured. On May 9th, in the Farmington to PNM weir stretch, radio contact was made with all eight fish. They didn't do any work to see if the fish were alive or if there were radio tags on the side of the river. They haven't moved more than 13 miles downstream.

Hogback Construction – Ron Bliesner showed pictures of the Hogback diversion under construction. The first phase is complete. There are two boat ramps in the area; the upstream one is under water right now. The downstream boat ramp is pretty good. We may need to negotiate with the landowner about a right of way for the Program if everybody uses it.

Three crossings need a little work this fall. They are too tight and not enough drop in some areas. The Hogback diversion and fish passage will be finished this winter.

Cudei – Reclamation designed the structure. Construction will begin in October or November and is scheduled to finish in February. They will remove about 2/3 of it. Some rock on river right will be left to help with erosion. They will pile up rock on river left. When they pull the structure, they will move a lot of sediment, so they will try to pull it out in February when the water level is low.

GIS Data – Ron Bliesner handed out a disk to Committee members. *Members are requested to check the data and let Ron know within 30 days if the data is correct.* It was suggested that we modify the decision made in February so that for requests that Ron gets for data before 1997, that they get the disc and not just the information they requested. This will make it much easier to administer. For data after 1997, the requesters must contact the researcher.

Modeling – Vince LaMarra and Bill Miller are trying to integrate bioenergetics into the model. They need some of the algorithms from Wisconsin to verify information. They hope to have model runs by end of the month or first part of next month.

Will it change the 800 pikeminnow carrying capacity? They don't know yet, but are trying to figure it out. Could use this model to come up with what kind of native fish community is needed to support pikeminnow population. For razorback suckers, they are using Reach 6, which is relatively predator free to establish biomass needed to support the population.

FY 2001 Field Activities Review

Jim Brooks/Nonnative removal - They removed 1200 fish (90%) in the first two trips. The last trip had the largest fish so far. The next trip will be July 9, during the low flow test. They will be looking at striped bass and seeing how successful we were in catfish removal. There were only four striped bass caught from Hogback to Bluff last week.

Frank Pfeifer/Razorback sucker monitoring - They have a trip planned from June 20 - 26, from Hogback to Bluff.

Amber Hobbes/YOY - They are still processing fish from last year. Bob Larsen has processed 281 lots for a total of 28,500 fish. He has 248 lots left.

Steve Platania/Razorback suckers - They have been holding razorback sucker from Willow Beach and will stock today. They will sample from Bluff to Clay Hills for razorback sucker larvae. They didn't catch any larvae the first trip and on the second trip, they think they caught some. Pikeminnow drift work will start in July and will go through the end of the summer.

Bill Miller/Modeling - They are working on the last population estimates for Reach 3 and 6, and

the lower Animas. One of assumptions in the model is that there will be seasonal use in Reach 7 and lower Animas.

Vince LaMarra and Ron Bliesner/Habitat mapping and quality - They hope to be done before winter.

Ron Bliesner/Geomorphology - They plan to do their studies in late July or early August or whenever flows are down below 1000 cfs.

Site specific locality information – Steve Platania and Sara Gottlieb have been processing data and ran into problems. There has been heavy use of river miles in describing collection localities, but several different maps were used. GIS also uses river miles. River miles have been determined using different methodologies.

They suggest that we use GPS units to document collection localities to allow consistency amongst the researchers. You can download coordinates when returning from the field which eliminates some recording error. They suggest that we start to record river miles by using GPS units immediately.

All researchers should start using GPS units to record locations every time you stop on the river to seine or do other work. This will add consistency to the data integration.

Review of Scopes of Work

Adult Fish Monitoring: Pretty much the same as the last few years with some salary increases.

Will need to be modified to remove data integration costs.

YOY and Small Bodied Fish: It is the same as last year. Will New Mexico be caught up in their processing of fish for the data integration? Maybe New Mexico should consider additional dollars for a technician to help with the processing. New Mexico believes they will be caught up. The Committee felt we should add dollars to help with the fish identification. **(Potential increase in staffing costs.)**

Data integration: It was decided that there should be one scope of work that shows everyone's data integration costs. All data through 2001 will be used. **This will have to be revised to incorporate integration from other parties.**

Larval Pikeminnow Drift: Part of the regular monitoring with no significant change. If all 8 radio-tagged fish are staying up higher in the system, we may want to change drift stations further up next year. **This may be revised to add additional site or to move the site.**

Larval Razorback Sucker Survey: There is a slight increase in cost to cover salaries and more trips. **Needs to be revised to indicate why there is an increased cost.** They are not ready to make the leap to recommend what we do on monitoring.

Specimen Curation: This is the same scope of work with a slight increase in cost. There were questions about the workload now that the red shiner work is complete. Steve Platania pointed out that there is a lag time in receiving the specimens once New Mexico has completed their

work. There is an up and down cycle in the workload. This would not cover the costs of any hybridization work. **Needs to be revised to add a few sentences to justify the same costs.**

Channel Morphology: There is a slight increase in staffing costs. In the past, BIA has paid for this work.

A discussion arose on the need for a new set of aerial photos. Digital photos were done in 1998. If we did it, we would want it at base flows for monitoring. This would probably be a separate scope of work. **Jim will check about the Service doing the work.** It would have to go to Keller-Bliesner for river mile transfers. **Jim Brooks and Frank Pfeifer will write the scope of work.**

Habitat Mapping: This is the same and is part of the base monitoring program. We are now down to 60 backwaters. We need to be able to integrate this kind of information with what is happening to the fish.

Water Temperature Monitoring: This is pretty much the same.

Water Quality: This is the same and part of the monitoring program.

GIS Database Management: There was a question about transferring this item to the Service. Do we need to start training them and moving it to them? Right now, the official site is the Service and Keller-Bliesner Engineering is the contractor. **For FY 2003, we should look at whether the Service could take it over.**

Five Year Integration: The scope of work is just for Ron Bliesner and Vince LaMarra's data, based on the cost of doing the flow recommendations. **Each of the researchers need to write a section on integration and get it to Shirley or Jim and then can break out budget by line item.** We are really talking about a ten year data set. Need to sit down and really go over the data. On Objective 4, we should be looking at external sources to evaluate the work that this group does. This is something that the Peer Review Panel should do. The panel should be here during the actual integration as well. ***The Committee will target the final integration by end of June and then the report by September.***

Committee members need to comment on the process and who should put together the final report. This should be done via the listserver as well as posting costs associated with data integration.

Peer Review Panel: **This will need to be revised to reflect the work that will be needed on the data integration.** We need to make sure the Peer Review Panel has the resources and time to commit to this effort. **Tom Wesche will work with Paul Holden to rewrite this scope of work.** The panelists would meet 4-5 times with groups/subgroups (20-30 man days) and would help evaluate the written product.

Spawning Bar Characterization: This is a new scope of work. Because fish are using one particular bar, they want to characterize it and see if we have any more in the river to determine if it is a limiting factor. After it is characterized, there will be a new scope of work to find other bars in the system based on search images. They will need to be doing the work at the same time

the fish are there to spawn. **This will be revised to include information from an Upper Basin review and establish protocol for monitoring. They will add a second year to look at other potential sites.** As we get more razorback suckers spawning, we need to be looking for all sites. Will write it to show that they will be ready to go on another spawning site if it is being utilized and then will characterize it.

Population Model Refinements: The scope of work is to complete a functional model. Last year it was to do a conceptual model. A portion of the model would be available for data integration and would be a good starting point on how all the stuff relates to one another. Envision the model as the framework for analysis. **This needs to be revised to complete the product and method sections.**

Water Temperature Modeling: There were two scopes of work presented for this work, basically doing two different things. Reclamation's proposal goes right to modeling. The temperature has reached the temperatures we were looking for in the critical habitat area, but they were later in the season. We know there is some kind of impact, but is it enough to justify the \$15 million to fix it? Reclamation's proposal would help you decide if you could modify the temperatures to what we need.

Reclamation's proposal selected a model that is really data intense. There were questions on what water data they going to use, what is the desired temperature that is talked about in the scope of work, is the data usable right now, etc. There are concerns about availability of meteorological data. **Reclamation needs to identify data needs, data gaps, etc.** It could be done in 2002 if they have all the data in their possession.

The pikeminnow population goal was based on the fish using part of the system above the mouth of the Animas. The flow recommendations will cause some dewatering in that area. Do we know what the benefits of raising the temperature would be? If we raised the temperature a few degrees, would the fish move up the system? Are we ready to tell them what the target temperatures are and when/where we want them? That information has to be given to the Bureau so they know what to target. One way to do that is get historical information and mimic the hydrograph temperatures.

Keller-Bliesner's proposal should be modified to look at historical and target temperatures and outline the potential benefits of modifying the temperature. Reclamation's proposal should be revised to determine if the targets are feasible.

Larval Fish and Nursery Habitat Survey: Want to look at the fish community in Reach 3 just after spring peak in low velocity and backwater habitats. They will tie it into the fall monitoring data and compare to summer information. They are looking to validate the flow recommendations in Reach 3. How does this differ from all the other scopes of work? This addresses seasonal issues and is not overlapping. The razorback survey ends in mid-June through the peak and descending limb of hydrograph. This scope of work is for after that. They are looking at fish community when no one else is after spring peak.

The Committee was reminded that they made a conscious decision to that time period out of the standard monitoring. There is unknown habitat utilization of razorbacks from spawning until

fall. This work could focus on that as well. In LRP, we show this work starting in 2005. It is probably not time to do this yet. **Not approved.**

Nonnative Species: This is basically the same with an increased cost to cover BIA. They will try to finish trips before end of year runoff starts, possibly in February and March.

Razorback Sucker Augmentation: This covers the cost to coordinate the augmentation efforts, including monitoring and stocking. The revised razorback sucker augmentation plan will be changed and sent out. This scope of work also covers purchasing pit tags at a cost of \$20,000.

Pikeminnow Augmentation - This deals with the monitoring and stocking of the pikeminnow. Dexter will raise the fish and Grand Junction will coordinate the stocking efforts of the raised fish. The first stocking will be in 2002. We may have to revisit how much can be produced at Dexter and see if we can stock more to shorten the total time in the augmentation plan. ***Jim Brooks will ask if Dexter can produce more fish and if they can, will increase that scope of work. Will be revised to remove the line about spawning and rearing.***

Roundtail Chub: This is the same proposal as last year. They weren't able to collect the fish needed. The Water Development Interests are willing to help the principal investigators raise the money to do the work outside of the Program. **This scope of work needs a paragraph on how it benefits the survival of endangered fish and make a stronger tie to the endangered fish. The budget portion needs to be rewritten to make it more understandable for the time table and the schedule. We need a task to specifically go back to studies mentioned and see how they were before Navajo Dam was in place.** The Biology Committee recommends that this scope of work go forward but Tom Wesche is opposed for the various reasons noted previously.

Colorado Pikeminnow Fingerling Production: **This will be revised to include a 20% overhead charge for a total cost of \$28,500.** Objective 2 is really what we are interested in and should be paying for. All of the other objectives should be deleted. **If Dexter can increase production, then it should be reflected in the scope of work..**

Interim Holding Facilities for Razorback Suckers: This scope of work is to have facilities available for holding fish from Willow Beach for a while until they can be stocked. The Federal facilities can not hold them that long, so it is a necessary link. **May need to increase capacity to hold more fish, maybe 150,000 fry. Revise scope of work accordingly.**

Long Range Plan and scopes of work, are other scopes of work needed?

What about genetics, specifically the hybridization of razorback suckers? Do we need a genetic baseline of the fish now so you have something to compare it against later? **Steve Platania will submit a scope of work on this item for review.** It probably could go forward if it has minimal cost.

Fish stocking policies (1.6.4): The State representatives met yesterday and they are to the point where they need the Tribes involved. Need to get all governing groups to get together. Does not need to be a scope of work. The time line is off, and should be modified.

Review allowable Contaminant levels (1.7.1): To date, we haven't identified anything that is a

problem or that will be projected. No scope of work is necessary this year. We may need to reword this in the LRP to just say monitor contaminants and identify corrective measures.

Augment the pikeminnow population (2.2.3): The start date needs to change to 2002.

Install selective passage at PNM weir (2.3.6): We need a scope of work to operate the fish passage at PNM. According to Reclamation, we need to give the first opportunity to the Navajo Nation. The Navajo's are looking at doing the work. We need to make sure they are accountable and have a scope of work. They will need to keep track of the size and species of the fish and do trash rack cleaning. They would operate the fish passage April through October. The scope of work should outline what is to be done with the fish (i.e. nonnatives taken out of the system, release the natives upstream). **Jim Brooks will let Bob Norman, Reclamation, that the scope of work for the operation is needed by May 25.**

Install fish passage at APS weir (2.3.7): **We need a preliminary design.** Reclamation or someone else will do this. This should be in the capital projects portion of the work plan, not in this part.

Expand monitoring of larvae and young (2.3.9): The start date should be changed to 2003.

Control non-native fish (2.5): Do we need to expand the non-native control to the lower reaches? We need to determine what part of hydrograph do the striped bass come into the system? Removal on the lower reaches would help with the striped bass control. **Utah should submit a scope of work for this work.**

We need all revised scopes of work by May 25. Please post them to the listserver.

Contracting procedures for 2002: Larry Crist, Reclamation mentioned that the contracting may be different next year. The requests for scopes of work will be published in the Commerce Business Daily which will open up the process to the public. This will open up the bidding process and will allow Reclamation to contract directly with private consultants. The Program will still control the work to be done and will review the proposals.

For 2001 funds, Reclamation is still receiving money from Western Area Power Administration and Larry is trying to do the contracts as the money comes in.

Next Meeting Date: September 4, 1 pm. Conference calls will be used if we need to clarify any scopes of work.

Adjourned at 1:30 pm.

Other Attendees:

Julie Jackson	Utah Division of Natural Resources
Matt Andersen	Utah Division of Natural Resources
Amber Hobbes	State of New Mexico
Shirley Mondy, Program Coordinator	U. S. Fish and Wildlife Service
Steve Harris	Water Development Interests
Nancy LaMascus	City of Farmington
Mike Buntjer	U. S. Fish and Wildlife Service
Keith Lawrence	ERI/Navajo Nation
Susan Jordan	Jicarilla Apache Nation
Joe Muniz	Jicarilla Apache Nation
Steve Platania	University of New Mexico
Clare A Bernero	State of New Mexico
Sara Gottlieb	University of New Mexico
Rob Ashman	Public Service Company of NM